

### **REMARKS**

The Office Action mailed April 12, 2006 considered claims 1-49. Claims 12-35 and 39-49 were withdrawn as being drawn to a non-elected group. Claims 9 and 36-38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1, 11 and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-2, 4, 7, 9-11 and 36-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Chu, et al. (US 6,493,720 B1) hereinafter *Chu*. Claims 3, 5, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chu in view of Jim Challenger, Arun Iyengar, Paul Dantzig "A Scalable System for Consistently Caching Dynamic Web Data", from here on referred as Challenger et al. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chu in view of Dettinger et al. (US 2003/0093413 A1).<sup>1</sup>

By this paper, claims 1, 5, 6, 8, 9, 11, and 36-38 have been amended.<sup>2</sup> Claims 12-35 and 39-49 have been cancelled. Accordingly, claims 1-11 and 36-38 are pending, of which claims are the only independent claims at issue.

The present invention is generally directed to registering for and retrieving database table change information that can be used to invalidate cache entries. Claim 1, for example, recites a method for configuring a database to provide a table change notification to a Web server when content in one of the data tables relevant to the Web server is altered. Claim 1 defines selecting a data table that is to be monitored for content changes. The selected data table is selected from among one or more data tables of a database. The selected data table provides cacheable content to the Web server for efficient generation of Web responses to Web based requests for content. Next, claim 1 defines inserting a record for the selected data table into a change notification table. The record includes versioning information for the selected data table. The versioning information is used to determine when a cache entry at the Web server is valid. The cache entry contains cacheable content from the selected data table for inclusion in Web responses. Next,

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<sup>1</sup> Although the prior art status of the cited art is not being challenged at this time, Applicant reserves the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

<sup>2</sup>Support for the amendments to the claims are found throughout the specification, Figures, and previously presented claims, including, paragraphs [0034], [0037], [0040], [0044], [0061] – [0070], [0102], [0103] and Figures 1 and 5.

claim 1 defines assigning a trigger to the selected data table. The trigger is configured to update the versioning information included in the record when content in the selected data table is altered. Next, claim 1 defines updating the versioning information in the change notification table in response to a portion of content in the selected data table being altered. Finally, claim 1 defines sending the updated versioning information to the Web server such that the updated versioning information is used to determine the validity of the cacheable content in the cache entry at the Web server.

Claim 36 is direct to a corresponding computer program product claim for implementing the method of claim 1.

*Chu* describes a method and system for synchronization of metadata in an information catalog. (Title). The metadata is included in a searchable information catalog that can be searched to determine what data is available. (Col. 5, ll. 1-38). Metadata assigned to objects is used to describe the objects. (Col. 6, ll. 52-56). Thus, generally, *Chu* describes searching metadata describing objects to locate objects of interest.

A metadata synchronizer monitors one or more objects processed by other tools to determine whether metadata for other objects has changed. (Col. 3, ll. 41-43). If metadata for an object has changed, the metadata synchronizer determines whether to modify metadata for that object in the information catalog. (Col. 3, ll. 46-48). The metadata synchronizer maintains timestamps for metadata of objects for comparison purposes and to determine whether the information catalog system or the source has the most current data. (Col. 7, ll. 48-51). The time stamps can be used to resolve conflicts when multiple sources modify objects and their metadata (Col. 7, ll. 51-60).

However, *Chu* neither discloses nor otherwise suggests inserting a record for a selected data table into a change notification table, the record including versioning information for the selected data table, the versioning information used to determine when a cache entry at the Web server is valid, the cache entry containing cacheable content from the selected data table for inclusion in Web responses, as recited in claim 1. Further, *Chu* neither discloses nor otherwise suggests sending updated versioning information to a Web server such that the updated versioning information is used to determine the validity of cacheable content in a cache entry at the Web server, as recited in claim 1. In view of the forgoing, and for either of these reasons, applicants submit that amended claim 1 patentably defines over the prior art of record.

In view of the forgoing, and at least for either of the same reasons, applicants submit that the amended claim 36 also patentably defines over the prior art of record. Applicants submit that each of the dependent claims also distinguish over the prior art of record because each of the dependent claims depend from one of claims 1 or 36.

Claims 1 and 36 were objected to for reciting "can be". Claims 1 and 36 have been amended and no longer recite "can be". Accordingly, Applicants request that these objections be withdrawn.

Claims 9 and 36-38 were rejected under 35 USC 101 as directed to non-statutory subject matter for describing a program per se with no supporting hardware. Claims 9 and 36 have been amended to recite "when executed by a processing unit". Accordingly, Applicants request that these rejections be withdrawn.

Claim 36 was rejected under 35 USC 101 for stating an intended use by use of the word "for" and "for use" in the preamble. Claim 36 has been amended removing these words from the preamble. Accordingly, Applicants request that this rejection be withdrawn.

Claims 36-38 were rejected under 35 USC 101 for not being limited to tangible media. Claim 36 has been amended. Applicants submit that claims 37 and 38 already define tangible media, "Physical storage media" and "system memory". Accordingly, Applicants request that these rejections be withdrawn.

Claims 1, 11, and 36 were rejected under 35 USC 112 for failing to particularly point out and distinctly claim the subject matter applicants regard as the invention.

In claim 1, it is unclear who does the "act of selecting". Claims 1, 2, and 3, have been amended to make this clearer. Accordingly, Applicants request that this rejection be withdrawn.

In claim 1, the word "causing" makes it unclear as to what Applicants intended metes and bounds of the claim are. Claim 1 has been amended to remove this word. Accordingly, Applicants request that this rejection be withdrawn.

In claim 36, the words "cause" and "causing" make it unclear as to what Applicants intended metes and bounds of the claim are. Claim 36 has been amended to remove these words. Accordingly, Applicants request that this rejection be withdrawn.

Claims 1 and 36 recite the limitation "the validity". There is insufficient antecedent basis for this limitation. Claims 1 and 36 have been amended (see second limitation) to provide

antecedent basis for the limitation "the validity". Accordingly, Applicants request that these rejections be withdrawn.

Claim 11 recites the limitation "a requesting server computer system". There is insufficient antecedent basis for this limitation. Claim 11 has been amended to remove this limitation. Accordingly, Applicants request that this rejection be withdrawn.

In view of the foregoing, Applicants respectfully submit that the other rejections to the claims are now moot and do not, therefore, need to be addressed individually at this time. It will be appreciated, however, that this should not be construed as Applicants acquiescing to any of the purported teachings or assertions made in the last action regarding the cited art or the pending application, including any official notice. Instead, Applicants reserve the right to challenge any of the purported teachings or assertions made in the last action at any appropriate time in the future, should the need arise. Furthermore, to the extent that the Examiner has relied on any Official Notice, explicitly or implicitly, Applicants specifically request that the Examiner provide references supporting the teachings officially noticed, as well as the required motivation or suggestion to combine the relied upon notice with the other art of record.

In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Dated this 12<sup>th</sup> day of July, 2006.

Respectfully submitted,



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